PATENT

IN THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) In a wireless communication system, a method for controlling a data transmission between a transmission source and a receiving device, the method comprising:

receiving a current transmission at a current data rate for a current transmission interval; detecting an average throughput for the data transmission and reflective of the current transmission;

comparing the detected average throughput against a threshold throughput, wherein the threshold throughput is based on a maximum supported average data rate; and

signaling the transmission source to stop the data transmission if the detected average throughput exceeds the threshold throughput.

- (Original) The method of claim 1, further comprising: signaling the transmission source to resume the data transmission if the threshold throughput is not exceeded.
 - 3. (Cancelled)
 - 4. (Cancelled)
- (Previously Presented) The method of claim 1, further comprising characterizing the performance of the receiving device prior to first field use of the receiving device.
 - 6. (Previously Presented) The method of claim 1, further comprising characterizing the performance of the receiving device dynamically during field use.

Attorney Docket No.: 000157

PATENT

7. (Previously Presented) In a wireless communication system, a method for controlling a data transmission between a transmission source and a receiving device, the method comprising:

receiving a current transmission at a current data rate for a current transmission interval; detecting an average throughput for the data transmission and reflective of the current transmission;

comparing the detected average throughput against a threshold throughput; signaling the transmission source to stop the data transmission if the detected average throughput exceeds the threshold throughput; and

averaging a value indicative of a throughput for the current transmission with values indicative of throughputs for one or more prior transmissions in one or more prior transmission intervals, wherein the averaging is achieved with a sliding window averaging.

- 8. (Previously Presented) The method of claim 7, wherein the averaging is further achieved with a particular averaging scheme selected based in part on a design of a data buffer used to store samples for the data transmission.
 - 9. (Cancelled)
 - 10. (Cancelled)
- 11. (Previously Presented) In a wireless communication system, a method for controlling a data transmission between a transmission source and a receiving device, the method comprising:

receiving a current transmission at a current data rate for a current transmission interval; detecting an average throughput for the data transmission and reflective of the current transmission:

comparing the detected average throughput against a threshold throughput; and signaling the transmission source to stop the data transmission if the detected average throughput exceeds the threshold throughput, wherein the signaling includes sending a message

Attorney Docket No.: 000157

to the transmission source to request the data transmission be stopped, and wherein the message

is covered by a null cover that indicates that data transmission is not requested by the receiving

device.

12. (Previously Presented) The method of claim 11, wherein the message requests a

transmission at zero data rate.

13. (Previously Presented) The method of claim 11, wherein the message is sent for

each transmission interval in which a transmission is not requested.

14. (Previously Presented) The method of claim 7, further comprising:

resetting the average throughput to an initial value prior to reception of a first

transmission for the data transmission.

15. (Original) The method of claim 1, wherein the data transmission is transmitted in

time division multiplexed (TDM) transmission intervals.

16. (Original) The method of claim 1, wherein the wireless communication system is

an HDR CDMA system.

17. (Original) The method of claim 1, wherein the wireless communication system is

a CDMA system that conforms to W-CDMA standard or cdma2000 standard.

18. (Previously Presented) The method of claim 7, further comprising:

if the data transmission has been stopped and the threshold throughput is not exceeded,

signaling the base station to resume the data transmission.

19. (Previously Presented) A terminal operative to receive a data transmission from a

transmission source in a wireless communication system, the terminal comprising:

Attorney Docket No.: 000157

Customer No.: 23696

4

a receiver unit operative to receive and process a modulated signal for the data transmission to provide digitized samples;

a demodulator coupled to the receiver unit and operative to receive and process the digitized samples to provide a value indicative of a current data rate for a current transmission in a current transmission interval;

a detector coupled to the demodulator and operative to

detect an average throughput for the data transmission, wherein the average throughput is reflective of the current data rate for the current transmission,

compare the detected average throughput against a threshold throughput, and provide a status signal indicative of a result of the comparison between the detected average throughput and the threshold throughput;

a controller coupled to the detector and operative to receive the status signal and generate a message requesting the transmission source to stop the data transmission if the detected average throughput exceeds the threshold throughput; and

a transmitter unit coupled to the controller and operative to receive and transmit the message,

wherein the detector includes:

a filter operative to receive a value indicative of a throughput for the current transmission and provide the average throughput, and

a comparator coupled to the filter and operative to receive and compare the average throughput with the threshold throughput to provide the status signal.

20. (Cancelled)

- 21. (Previously Presented) The terminal of claim 19, wherein the filter is implemented as a finite impulse response (FIR) filter.
- 22. (Original) The terminal of claim 19, wherein the message conforms to a DRC message defined by an HDR CDMA system.

Attorney Docket No.: 000157

23. (Currently Amended) An apparatus adapted for wireless communications, comprising A processor readable medium comprising instruction codes which, when executed by a processor, cause the processor to perform operations including:

a processor configured to:

receive[[ing]] a current transmission at a current data rate for a current transmission interval;

detect[[ing]] an average throughput for a data transmission and reflective of the current transmission;

compare[[ing]] the detected average throughput against a threshold throughput;

signal[[ing]] a transmission source to stop the data transmission if the detected average throughput exceeds the threshold throughput; and

average[[ing]] a value indicative of a throughput for the current transmission with values indicative of throughputs for one or more prior transmissions in one or more prior transmission intervals, wherein the averaging is achieved with a sliding window averaging.

24. (Currently Amended) <u>An apparatus adapted for wireless communications</u>, <u>comprising A processor readable medium comprising instruction codes which, when executed by a processor, cause the processor to perform:</u>

a processor configured to:

receive[[ing]] a current transmission at a current data rate for a current transmission interval:

detect[[ing]] an average throughput for a data transmission and reflective of the current transmission:

compare[[in]] the detected average throughput against a threshold throughput; and signal[[ing]] a transmission source to stop the data transmission if the detected average throughput exceeds the threshold throughput, wherein the signaling includes sending a message to the transmission source to request the data transmission be stopped, and wherein the message is covered by a null cover that indicates that data transmission is not requested by a receiving device.

Attorney Docket No.: 000157

- 25. (Previously Presented) The method of claim 1, wherein the threshold throughput is set lower than the maximum supported average data rate to account for signaling delay.
- 26. (Previously Presented) The method of claim 1, further comprising: signaling the transmission source to transmit at a lower data rate that does not cause the average throughput to exceed the threshold throughput, instead of stopping the data transmission, if the detected average throughput exceeds the threshold throughput.
- 27. (Currently Amended) <u>An apparatus adapted for wireless communications, comprising A processor readable medium comprising instruction codes which, when executed by a processor, cause the processor to perform:</u>

a processor configured to:

receive[[ing]] a current transmission at a current data rate for a current transmission interval;

detect[[ing]] an average throughput for a data transmission and reflective of the current transmission;

compare[[ing]] the detected average throughput against a threshold throughput, wherein the threshold throughput is based on a maximum supported average data rate; and

signal[[ing]] a transmission source to stop the data transmission if the detected average throughput exceeds the threshold throughput.

28. (Previously Presented) An apparatus for controlling a data transmission between a transmission source and a receiving device in a wireless communication system, the apparatus comprising:

means for receiving a current transmission at a current data rate for a current transmission interval;

means for detecting an average throughput for the data transmission and reflective of the current transmission;

means for comparing the detected average throughput against a threshold throughput, wherein the threshold throughput is based on a maximum supported average data rate; and

Attorney Docket No.: 000157

PATENT

means for signaling the transmission source to stop the data transmission if the detected

average throughput exceeds the threshold throughput.

29. (Previously Presented) The apparatus of claim 28, further comprising:

means for signaling the transmission source to resume the data transmission if the

threshold throughput is not exceeded.

(Previously Presented) The apparatus of claim 28, further comprising: 30.

means for averaging a value indicative of a throughput for the current transmission with

values indicative of throughputs for one or more prior transmissions in one or more prior

transmission intervals.

(Previously Presented) The apparatus of claim 28, further comprising: 31.

means for covering a message with a null cover to indicate that data transmission is not

requested by the receiving device; and

means for sending the message to the transmission source to request the data transmission

be stopped.

32. (Previously Presented) The apparatus of claim 28, further comprising:

means for generating a message requesting a transmission at zero data rate; and

means for sending the message to the transmission source to request the data transmission

be stopped.

33. (Previously Presented) The apparatus of claim 28, further comprising:

means for signaling the transmission source to transmit at a lower data rate that does not

cause the average throughput to exceed the threshold throughput, instead of stopping the data

transmission, if the detected average throughput exceeds the threshold throughput.

(Previously Amended) An apparatus for receiving a data transmission from a 34.

transmission source in a wireless communication system, the apparatus comprising:

Attorney Docket No.: 000157

Customer No.: 23696

8

a detector operative to receive a value indicative of a current data rate for a current transmission in a current transmission interval, to detect an average throughput for the data transmission and reflective of the current transmission, to compare the detected average throughput against a threshold throughput, wherein the threshold throughput is based on a maximum supported average data rate, and to provide a status signal indicative of a result of the comparison between the detected average throughput and the threshold throughput; and

a controller coupled to the detector and operative to receive the status signal and to signal the transmission source to stop the data transmission if the status signal indicates that the detected average throughput exceeds the threshold throughput.

35. (Previously Presented) The apparatus of claim 34, wherein the controller is operative

to signal the transmission source to resume the data transmission if the threshold throughput is not exceeded.

36. (Previously Presented) The apparatus of claim 34, wherein the detector is operative

to average a value indicative of a throughput for the current transmission with values indicative of throughputs for one or more prior transmissions in one or more prior transmission intervals.

37. (Previously Presented) The apparatus of claim 34, wherein the controller is operative

to cover a message with a null cover to indicate that data transmission is not requested, and

to send the message to the transmission source to request the data transmission be stopped.

38. (Previously Presented) The apparatus of claim 34, wherein the controller is operative

Attorney Docket No.: 000157

to generate a message requesting a transmission at zero data rate; and to send the message to the transmission source to request the data transmission be stopped.

39. (Previously Presented) The apparatus of claim 34, wherein the controller is operative

to signal the transmission source to transmit at a lower data rate that does not cause the average throughput to exceed the threshold throughput, instead of stopping the data transmission, if the detected average throughput exceeds the threshold throughput.

40. (Previously Presented) A method for sending a data transmission to a receiving device in a wireless communication system, the method comprising:

receiving data to send to the receiving device;

entering a wait state if the data transmission to the receiving device has been stopped based on signaling sent by the receiving device when a detected average throughput at the receiving device exceeds a threshold throughput, wherein the threshold throughput is based on a maximum supported average data rate for the receiving device; and

sending the data to the receiving device if the data transmission has not been stopped or upon exiting the wait state when the data transmission is resumed.

41. (Previously Presented) The method of claim 40, wherein the entering the wait state comprises

entering the wait state in response to receiving a message covered with a null cover from the receiving device.

42. (Previously Presented) The method of claim 40, wherein the entering the wait state comprises

entering the wait state in response to receiving a message requesting a transmission at zero data rate from the receiving device.

Attorney Docket No.: 000157

- 43. (Previously Presented) The method of claim 40, further comprising: exiting the wait state in response to receiving signaling sent by the receiving device to resume the data transmission when the threshold throughput is not exceeded at the receiving device.
- 44. (Previously Presented) The method of claim 40, further comprising: sending the data at a lower data rate that does not cause the average throughput to exceed the threshold throughput at the receiving device, instead of entering the wait state, if signaling indicating that the detected average throughput exceeded the threshold throughput is received from the receiving device.
- 45. (Previously Presented) An apparatus for sending a data transmission to a receiving device in a wireless communication system, the apparatus comprising:

means for receiving data to send to the receiving device;

means for entering a wait state if the data transmission to the receiving device has been stopped based on signaling sent by the receiving device when a detected average throughput at the receiving device exceeds a threshold throughput, wherein the threshold throughput is based on a maximum supported average data rate for the receiving device; and

means for sending the data to the receiving device if the data transmission has not been stopped or upon exiting the wait state when the data transmission is resumed.

46. (Previously Presented) The apparatus of claim 45, wherein the means for entering the wait state comprises

means for entering the wait state in response to receiving a message covered with a null cover from the receiving device.

47. (Previously Presented) The apparatus of claim 45, wherein the means for entering the wait state comprises

means for entering the wait state in response to receiving a message requesting a transmission at zero data rate from the receiving device.

Attorney Docket No.: 000157

- 48. (Previously Presented) The apparatus of claim 45, further comprising: means for exiting the wait state in response to receiving signaling sent by the receiving device to resume the data transmission when the threshold throughput is not exceeded at the receiving device.
- 49. (Previously Presented) The apparatus of claim 45, further comprising:
 means for sending the data at a lower data rate that does not cause the average throughput
 to exceed the threshold throughput at the receiving device, instead of entering the wait state, if
 signaling indicating that the detected average throughput exceeded the threshold throughput is
 received from the receiving device.
- 50. (Previously Presented) An apparatus for sending a data transmission to a receiving device in a wireless communication system, the apparatus comprising:

 a data queue operative to receive data to send to the receiving device; and

a scheduler operative to enter a wait state if the data transmission to the receiving device has been stopped based on signaling sent by the receiving device when a detected average throughput at the receiving device exceeds a threshold throughput, wherein the threshold throughput is based on a maximum supported average data rate for the receiving device, and to send the data to the receiving device if the data transmission has not been stopped or upon exiting the wait state when the data transmission is resumed.

- 51. (Previously Presented) The apparatus of claim 50, wherein the scheduler is operative to enter the wait state in response to receiving a message covered with a null cover from the receiving device.
- 52. (Previously Presented) The apparatus of claim 50, wherein the scheduler is operative to enter the wait state in response to receiving a message requesting a transmission at zero data rate from the receiving device.

12

Attorney Docket No.: 000157

- 53. (Previously Presented) The apparatus of claim 50, wherein the scheduler is operative to exit the wait state in response to receiving signaling sent by the receiving device to resume the data transmission when the threshold throughput is not exceeded at the receiving device.
- 54. (Previously Presented) The apparatus of claim 50, wherein the scheduler is operative to send the data at a lower data rate that does not cause the average throughput to exceed the threshold throughput at the receiving device, instead of entering the wait state, if signaling indicating that the detected average throughput exceeded the threshold throughput is received from the receiving device.
- 55. (Currently Amended) An apparatus adapted for wireless communications, comprising A-processor-readable-medium-comprising-instruction-codes which, when executed by a processor, cause the processor to perform:

a processor configured to:

receive[[ing]] data to send to a receiving device;

enter[[ing]] a wait state if a data transmission to the receiving device has been stopped based on signaling sent by the receiving device when a detected average throughput at the receiving device exceeds a threshold throughput, wherein the threshold throughput is based on a maximum supported average data rate for the receiving device; and

send[[ing]] the data to the receiving device if the data transmission has not been stopped or upon exiting the wait state when the data transmission is resumed.

Attorney Docket No.: 000157